

# JVC

# SERVICE MANUAL

## COLOUR VIDEO MONITOR

**TM-H1950CG<sub>/E</sub>,**  
**TM-H1950CG<sub>/U</sub>,**  
**TM-H1950CG<sub>/C</sub>**

BASIC CHASSIS

**S1**

Supplementary

Some parts of circuits of this model are changed for improvement of performance.  
This Service Manual describes the differences because of the circuit change.  
This Service Manual consists of Service Manual, differences in STANDARD CIRCUIT DIAGRAM and DIFFERENCE PARTS LIST.  
For details other than those described in this manual, please refer to the TM-H1950CG/E , TM-H1950CG/U Service Manual (No.51961, Jun. 2002) and TM-H1950CG/C Service Manual (No.51961B 2003/05).

### ■ OUTLINE

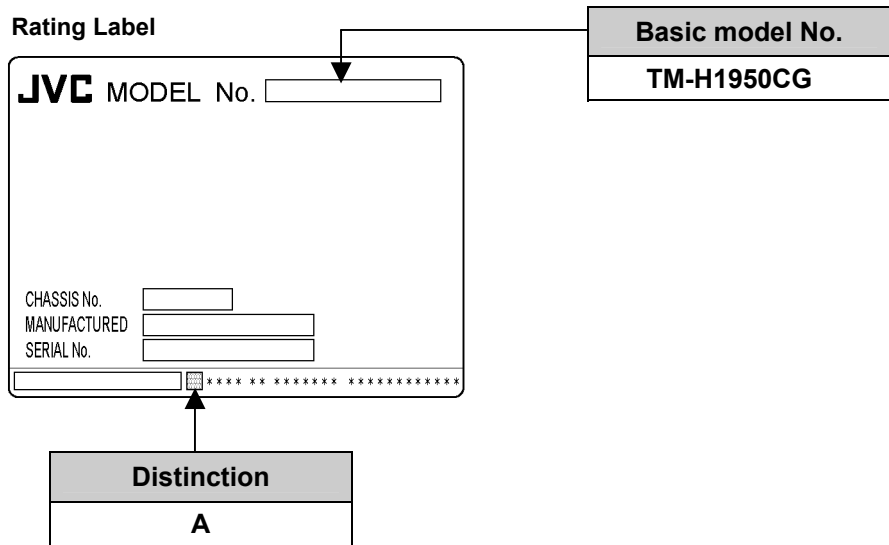
According to a monitor's installation condition, it may be influenced by a magnetic field and irregular colour may be caused.  
In order to avoid this, the landing(irregular colour) correction function was added.  
Therefore, the SIGNAL INPUT PWB is changed because a landing coil is added and a correction circuit is supported.

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## ■ DISTINCTION

“ A ” is indicated in a distinction of rating label.



## ■ MAIN DIFFERENCES

ITEM	PREVIOUS	NEW
LANDING COIL (LANDING FUNCTION)	× (No)	○ (Yes)
SIGNAL INPUT PWB	FX-6103A-H2	FX-6103B-H2
MICRO COMPUTER ( IC6701 )	M37207MC-316SP	M37207MC-322SP
MEMORY IC ( IC6702 )	AT24C08-H1750C	AT24C08-H1750CA
SERVICE MODE CONTROL BLOCK < C34 : 001 > < C35 : 000 >	× (No)	○ (Yes)

## ■ NOTICE IN REPLACING MEMORY IC

- The previous memory IC cannot be used for a new CPU with landing correction function.
- Be sure to use a new memory IC for a new CPU.
- Since a new CPU is programmed to be upper-compatible with the previous circuit, use a new CPU together with a new memory IC.

## ■ DIFFERENCES

### 1. “REPLACEMENT OF MEMORY IC” in “SPECIFIC SERVICE INSTRUCTIONS”

#### BLOCK SELECT ITEMS (Page 11)

##### CONTROL BLOCK

ITEM	CONTENTS
C01	DESTINATION (000 : For Japan, 001 : For Europe / US)

ITEM	CONTENTS
C01	DESTINATION (000 : For Japan, 001 : For Europe / US, <b>010 : For OEM</b> )
C34	LANDING ENABLE
C35	LANDING START

CHANGE

ADDITION

## 2. In “ADJUSTMENT”

### BASIC ADJUSTMENT OF LANDING CORRECTION <ADDITIONAL ITEMS>

#### (1) ADJUSTMENT PROCEDURE

- 1) Input the whole white signal.
- 2) Press [MENU] and [CONTRAST / BRIGHT] button simultaneously.  
**LANDING : \*\*** is displayed on the screen (Fig. 1).
- 3) Adjust to the state where irregular colour is not most conspicuous with [VOLUME / SELECT(+ / -)] buttons (Fig. 1).
- 4) If adjustment is completed, return with [MENU] button (Fig. 1).

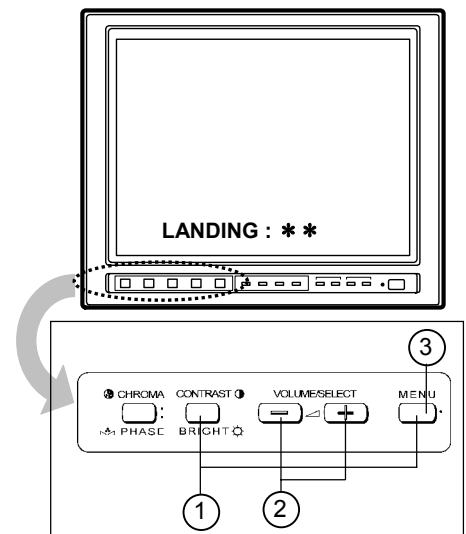


Fig. 1

### 3. In “ADJUSTMENT”

#### INITIAL SETTINGS OF THE SERVICE MENU (Page 25)

Items shown in ☐ in the following tables are fixed value. Never change the items.

#### CONTROL BLOCK

##### CHANGED ITEM

ITEM	CONTENTS	VARIABLE RANGE
C01	DESTINATION 0 : FOR JAPN (9300) 1 : FOR EUROPE / US (6500)	000 ~ 001

CHANGE

ITEM	CONTENTS	VARIABLE RANGE
C01	DESTINATION 000 : FOR JAPAN (9300) 001 : FOR EUROPE / US (6500) <b>010 : FOR OEM (9300)</b>	000 ~ 129

##### ADDITIONAL ITEM

ITEM	CONTENTS	VARIABLE RANGE	ATTRIBUTE	INITIAL VALUE
C34	LANDING ENABLE	000 ~ 001	FIXED	001
C35	LANDING START	000 ~ 001	FIXED	000

## ■ DIFFERENT PARTS LIST

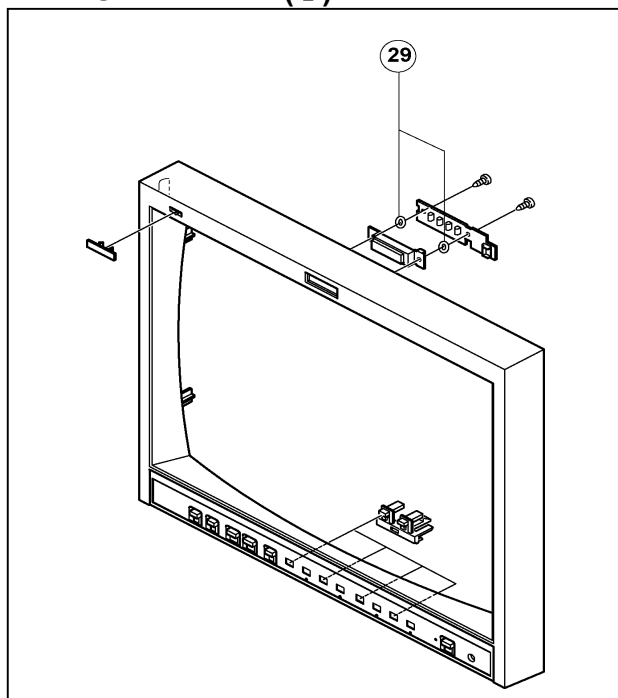
### USING P.W. BOARD (Page 40)

P.W.B. ASS'Y	Parts No.	
	PREVIOUS	NEW
SIGNAL INPUT P.W.B ASS'Y	FX-6103A-H2	<b>FX-6103B-H2</b>
SLOT P.W.B ASS'Y	FX-8022A-H2	<b>FX-8022B-H2</b>

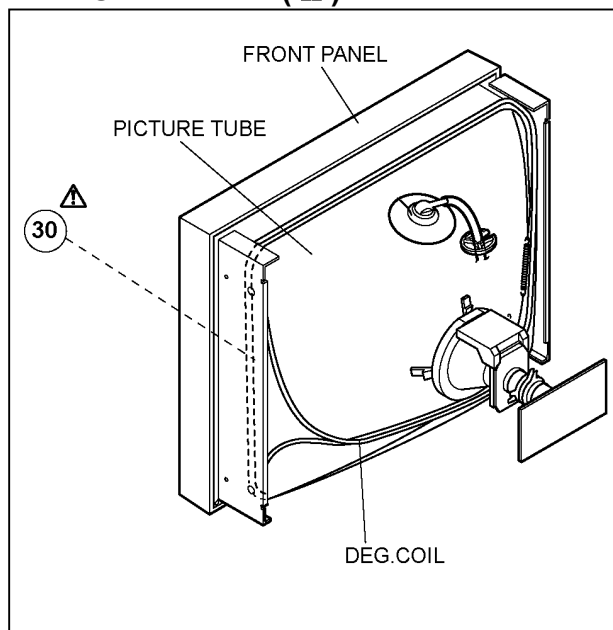
### EXPLODED VIEW PARTS LIST ( I ) (Page 41)

⚠	Ref. No.	Parts No.		Parts Name	Description
		PREVIOUS	NEW		
	29	_____	<b>LC41408-001A</b>	SPACER	(×2) ADDITION

### EXPLODED VIEW ( I )



### EXPLODED VIEW ( II )



### EXPLODED VIEW PARTS LIST ( II ) (Page 42~43)

⚠	Ref. No.	Parts No.		Parts Name	Description
		PREVIOUS	NEW		
⚠	30	_____	<b>QQW0141-001</b>	LANDING COIL	ADDITION

# PRINTED WIRING BOARD PARTS LIST

## SIGNAL INPUT P.W. BOARD ASS'Y (Page 48~52)

△	Symbol No.	Parts No.		Parts name	Description
		PREVIOUS	NEW		
		FX-6103A-H2	FX-6103B-H2		
	R6063	_____	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R6064	_____	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R6066	_____	NRSA63J-153X	MG R	15kΩ 1/16W J
	R6067	_____	NRSA63J-102X	MG R	1KΩ 1/16W J
	R6068	_____	NRSA63J-103X	MG R	10KΩ 1/16W J
	R6069	_____	NRSA63J-102X	MG R	1KΩ 1/16W J
	R6071	_____	QRE121J-150Y	C R	15Ω 1/2W J
	R6072	_____	NRSA63J-123X	MG R	12KΩ 1/16W J
	R6073	_____	NRSA63J-103X	MG R	10KΩ 1/16W J
	R6074	_____	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R6706	NRSA63J-103X	_____	MG R	DELETE
	R6790	NCF31CZ-104X	_____	C CAP	DELETE
	R6797	_____	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R6798	_____	NRSA63J-222X	MG R	2.2KΩ 1/16W J
	C6003	QETN1HM-475Z	QEHR1HM-475Z	E CAP	4.7μF 50V M
	C6005	QETN1HM-475Z	QEHR1HM-475Z	E CAP	4.7μF 50V M
	C6007	QETN1HM-475Z	QEHR1HM-475Z	E CAP	4.7μF 50V M
	C6009	QETN1HM-225Z	QEHR1HM-225Z	E CAP	2.2μF 50V M
	C6010	QETN1HM-225Z	QEHR1HM-225Z	E CAP	2.2μF 50V M
	C6026	QETN1HM-226Z	QEHR1HM-226Z	E CAP	22μF 50V M
	C6038	QETN1HM-225Z	QEHR1HM-225Z	E CAP	2.2μF 50V M
	C6040	_____	NDC31HJ-101X	C CAP	100pF 50V J
	C6041	_____	NCB31HK-103X	C CAP	0.01μF 50V K
	C6043	_____	QEHR1HM-336Z	E CAP	33μF 50V M
	C6101	QETN1CM-107Z	QEHR1CM-107Z	E CAP	100μF 16V M
	C6105	QENC1HM-105Z	QTNC1HM-105Z	BP E CAP.	1μF 50V M
	C6107	QETN1CM-107Z	QEHR1CM-107Z	E CAP	100μF 16V M
	C6109	QETN1CM-107Z	QEHR1CM-107Z	E CAP	100μF 16V M
	C6118	QETN1CM-107Z	QEHR1CM-107Z	E CAP	100μF 16V M
	C6119	QETN1CM-107Z	QEHR1CM-107Z	E CAP	100μF 16V M
	C6125	QETN1HM-106Z	QEHR1HM-106Z	E CAP	10μF 50V M
	C6130	QENC1CM-336Z	QTNC1CM-336Z	BP E CAP.	33μF 16V M
	C6141	QENC1CM-106Z	QTNC1CM-106Z	BP E CAP.	10μF 16V M
	C6208	QFV71HJ-224Z	QFVF1HJ-224Z	MF CAP.	0.22μF 50V J
	C6216	QETN1CM-107Z	QEHR1CM-107Z	E CAP	100μF 16V M
	C6223	QENC1HM-474Z	NCB31AK-474X	C CAP	0.47μF 10V K
	C6225	QETN1CM-107Z	QEHR1CM-107Z	E CAP	100μF 16V M
	C6227	QENC1HM-474Z	NCB31AK-474X	C CAP	0.47μF 10V K
	C6233	QETN1HM-105Z	QEHR1HM-105Z	E CAP	1μF 50V M
	C6234	QETN1HM-105Z	QEHR1HM-105Z	E CAP	1μF 50V M
	C6235	QETN1HM-105Z	QEHR1HM-105Z	E CAP	1μF 50V M

⚠	Symbol No.	Parts No.		Parts name	Description
		PREVIOUS	NEW		
		FX-6103A-H2	FX-6103B-H2		
	C6238	QENC1CM-336Z	QTNC1CM-336Z	BP E CAP.	33 $\mu$ F 16V M
	C6239	QENC1CM-336Z	QTNC1CM-336Z	BP E CAP.	33 $\mu$ F 16V M
	C6243	QENC1CM-106Z	QTNC1CM-106Z	BP E CAP.	10 $\mu$ F 16V M
	C6403	QETN1EM-476Z	QEHR1VM-476Z	E CAP.	47 $\mu$ F 35V M
	C6520	QETN1CM-107Z	QEHR1CM-107Z	E CAP	100 $\mu$ F 16V M
	C6521	QETN1HM-225Z	QEHR1HM-225Z	E CAP	2.2 $\mu$ F 50V M
	C6529	QETN1HM-225Z	QEHR1HM-225Z	E CAP	2.2 $\mu$ F 50V M
	C6534	QETN1HM-106Z	QEHR1HM-106Z	E CAP	10 $\mu$ F 50V M
	C6722	—————	NCF31CZ-104X	C CAP	0.1 $\mu$ F 16V Z
	C6903	QETN1CM-107Z	QEHR1CM-107Z	E CAP	100 $\mu$ F 16V M
	D6714	—————	MA111-X	SI. DIODE	ADDITION
	IC6003	—————	BA10358	IC	ADDITION
	IC6004	—————	LA6515	IC	ADDITION
	IC6701	M37207MC-316SP	M37207MC-322SP	IC	
	IC6702	AT24C08-H1750C	AT24C08-H1750CA	IC	(SERVICE)
	X6701	CST8.00MTW	QAX0667-001Z	C RESONATOR	

#### SLOT P.W. BOARD ASS'Y (Page 53)

⚠	Symbol No.	Parts No.		Parts name	Description
		PREVIOUS	NEW		
		FX-8022A-H2	FX-8022B-H2		
	R8007	NRSA63J-103X	NRSA63J-223X	MG R	22K $\Omega$ 1/16W J
	R8016	NRSA63J-153X	NRSA63J-472X	MG R	4.7K $\Omega$ 1/16W J
	R8018	NRSA63J-0R0X	NRSA63J-101X	MG R	100 $\Omega$ 1/16W J
	R8029	NRSA63J-472X	NRSA63J-222X	MG R	2.2K $\Omega$ 1/16W J
	R8034	—————	NRSA63J-154X	MG R	150k $\Omega$ 1/16W J
	R8035	—————	NRSA63J-102X	MG R	1K $\Omega$ 1/16W J
	C8001	QETN1HM-106Z	QEHR1HM-106Z	E CAP.	10 $\mu$ F 50V M
	C8002	QENC1HM-105Z	QTNC1HM-105Z	BP E CAP.	1 $\mu$ F 50V M
	C8004	QETN1HM-335Z	QEHR1HM-335Z	E CAP.	3.3 $\mu$ F 50V M
	C8006	QETN1HM-106Z	QTNC1HM-106Z	BP E CAP.	10 $\mu$ F 50V M
	C8007	QENC1HM-105Z	QEHR1HM-106Z	E CAP.	10 $\mu$ F 50V M
	C8011	QETN1HM-106Z	QEHR1HM-106Z	E CAP.	10 $\mu$ F 50V M
	C8018	QETN1HM-106Z	QEHR1HM-106Z	E CAP.	10 $\mu$ F 50V M
	C8019	QETN1HM-106Z	QEHR1HM-106Z	E CAP.	10 $\mu$ F 50V M
	C8020	—————	NCB31HK-152X	C CAP	1500pF 50V K
	C8021	—————	NDC31HJ-151X	C CAP	150pF 50V J



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(No. 51961C)



Printed in Japan  
WPC